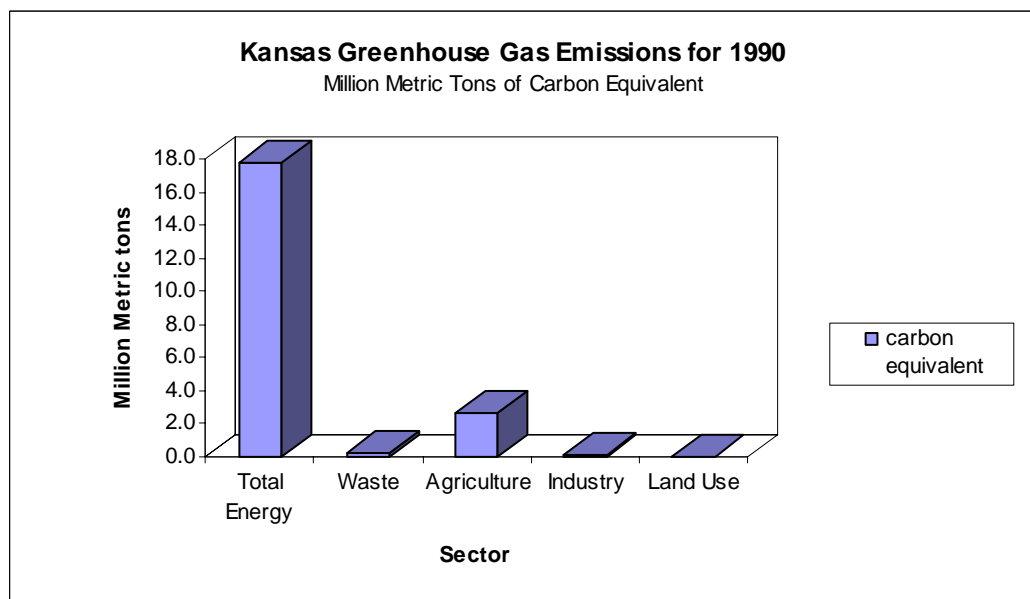


## KANSAS GREENHOUSE GAS EMISSIONS AND SINKS INVENTORY: SUMMARY



The report “*Greenhouse Gas Emission Inventory for the State of Kansas: Estimates for 1990*” provides a detailed inventory of greenhouse gas emissions and sinks for Kansas in 1990. Emissions were estimated using methods from EPA’s 1992 guidance document ***State Workbook: Methodologies for Estimating Greenhouse Gas Emissions***. In 1990, Kansas emitted 20.8 million metric tons of carbon equivalent (MMTCE). Kansas estimated emissions of 0.01 MMTCE from biomass fuels. Emissions from biomass fuels are not included in the reported total or the table below.<sup>1</sup>

The principal greenhouse gases were carbon dioxide, comprising 65.2 million metric tons (17.8 MMTCE), and methane, with 0.4 million metric tons (2.1 MMTCE). Other emissions included 0.07 million metric tons of nitrous oxide (0.09 MMTCE).

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<sup>1</sup> Note that the state of the art emission inventory method has advanced since Kansas completed its inventory; therefore, we revised Kansas’ emission estimates to reflect updated values for global warming potentials. The most recent inventory guidance is available on the Internet at <http://www.epa.gov/ttnchie1/eiip/techrep.htm#green>.

### Kansas Greenhouse Gas Emissions for 1990

SECTOR	CO <sub>2</sub> (MMTCE)	Methane (MMTCE)	Nitrous Oxide (MMTCE)	HFCs, PFCs, and SF6 (MMTCE)	Total GHG Emissions (MMTCE)
Energy - Residential	1.0	*	*	*	1.0
Energy - Commercial	0.8	*	*	*	0.8
Energy - Industrial	3.8	*	*	*	3.8
Energy - Transport	5.2	*	*	*	5.2
Energy - Utility	7.1	*	*	*	7.1
Energy - Exported Electricity	*	*	*	*	*
Energy - Other	*	*	*	*	*
<b>Total Energy</b>	<b>17.8</b>	<b>0.1</b>	*	*	<b>17.8</b>
<b>Waste</b>	*	<b>0.3</b>	*	*	<b>0.3</b>
<b>Agriculture</b>	*	<b>1.8</b>	<b>0.8</b>	*	<b>2.6</b>
<b>Industry</b>	<b>0.0</b>	*	<b>0.1</b>	*	<b>0.1</b>
<b>Land Use</b>	<b>0.1</b>	*	*	*	<b>0.1</b>
<b>Total</b>	<b>17.8</b>	<b>2.1</b>	<b>0.9</b>	*	<b>20.8</b>

All emissions are reported in million metric tons of carbon equivalent (MMTCE).

An asterisk (\*) indicates that emissions of the gas from this sector were zero, insignificant, or not reported.

Emissions due to coal mining and extraction of natural gas and oil are included in the energy – other figures, and emissions from biofuel combustion are excluded.

The major source of carbon dioxide emissions was fossil fuel combustion (85%), most of which (70%) was accounted for by the electric utility and transportation sectors. Contributors to methane emissions included domesticated animals (76%), landfills (12%), manure management (7%), and minor emissions from mining and extraction of natural gas, oil, and coal, and wastewater treatment. Sources of nitrous oxide emissions included fertilizer use (90%) and industrial processes (10%). Kansas did not evaluate sources and sinks (i.e., an increase in forest carbon storage) associated with land use.

Kansas emissions in 1990 were 8.4 MTCE per capita, compared to 1990 U.S. emissions of 6.4 MTCE per capita.